

## TEACHING THE OWNER TO KNOW HIS AUTOMOBILE

Being the Nineteenth of a Series of Practical Articles by an Expert on the Subject of the Car and Its Operation.

By WM. H. STEWART, JR.,

Stewart Automobile School.

Most owners seem to have the impression that a thorough knowledge of their car is unnecessary. Although with a superficial knowledge some owners may manage to drive a car, yet how unsatisfactory it is for a sensible man to operate a car under such conditions.

There is a vast difference between mere driving and intelligent operation. Simply driving a car does not mean anything.

The proper shifting of gears and application of power at the proper time determine the efficiency and life of the whole machine.

In the hands of an untrained person the highest grade automobile will rapidly depreciate and be in need of constant repair, while the trained operator will prolong the service of a lower grade car.

If owners would take the time and effort to master their car they would have less trouble and expense and would realize pleasure and value from the investment. The real pleasure in motoring lies in knowing how to drive properly and feeling confident to make repairs in time of necessity. Most operators make

only caution being to keep the oil tank properly filled and observe the proper flow through the gauges.

The clutch system, however, is a source of trouble in many ways. Few operators understand it sufficiently to be without a car. When trouble occurs it must be traced, and to do so quickly one must have an intimate knowledge of its workings.

The most difficult task for the driving novice to master is gear shifting. The disengagement of the clutch, together with the speed lever movement, is quite difficult at first. If there were not so many things to do all at the same time the beginner would be less confused.

Preparatory to starting the engine one should always be cautious. First note that the gear lever is in neutral position; also that the emergency brake is set. The next very important step is to retard the spark lever. With this in a safe position to avoid a "kick back," and the throttle partially open, the engine is ready for the switch and cranking. Assuming that the engine is now started, advance the spark to the normal position of the quadrant and adjust the hand throttle until motor runs smoothly and with out racing.

Before starting the car it may be well

to note a few "Don'ts," namely: Don't place the hands above the centre of the steering wheel at any time; don't take a death grip on the steering wheel, as it hinders the driver's vision and is tiresome and dangerous; don't race the motor; don't move the gear lever without disengaging the clutch; don't let the clutch in fast, especially when starting the car from a standstill; don't move the feet away from the clutch pedal when the car is moving—it should always be in position; don't start the car on any other than first speed; don't slip the clutch too much, as it will burn or wear beyond repair; don't watch the fellow behind, as he is watching you; don't take your eyes off the road for any reason whatever while the car is rolling fast.

Men as a rule are overcautious while learning, and consequently slow at learning. While to be cautious is most advisable, nerve is required, especially in driving an automobile in heavy traffic. During the past year many women have learned the art of driving and also how to repair their own machines, and to my knowledge not one has expressed regret at knowing how to do the right thing at the right time.

Driving your own machine is exhilarating. It not only affords plenty of fresh air and excitement but also good exercise. In fact there is much more exercise in operating an automobile than there is driving a horse. All the muscles of the body are employed in the control of a machine, while only the muscles

of the arms are used in driving a horse. Then, again, it is much safer to drive a machine. A good horse is always subject to a scare, and a slight mislay on the part of a driver results disastrously. The automobile is mechanically controlled and subject to the driver. One has only to press both feet forward to bring the car to a stop. In the modern cars the control is very simple. Very little strength is required to operate successfully the most powerful types. It is simply a matter of nerve and good judgment on the part of the driver.

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### HOLLANDER'S SERVICE PLAN.

H-A-L and Grant Owners Are Much Pleased.

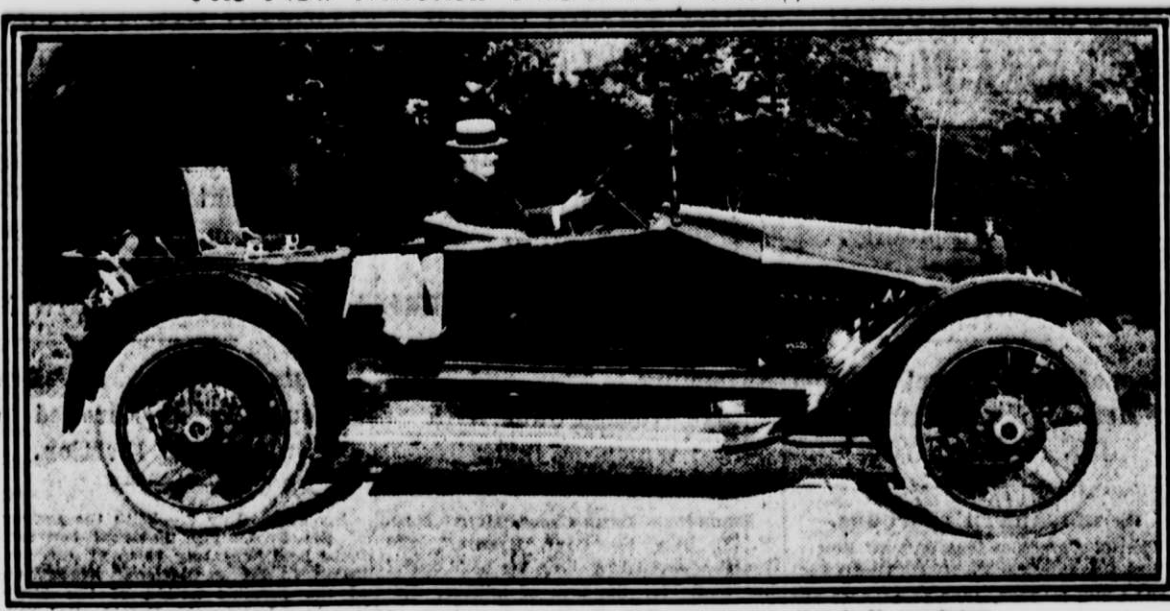
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## The New Mitchell Two-Five Passenger Roadster



C. R. Dalglish in a specially designed C. H. P. 2-5 passenger Mitchell roadster.

This is one of the novel roadsters shown this year on Broadway and is exclusively designed and built by the Carl H. Page Motors Company. The seating arrangements are very unique, having seats for two people in front when the

other seats are closed down. The rear can be opened, making two large, comfortable seats, and the door on the right hand side opens to allow the occupants of the rear seats to enter. This door also forms an extra seat, making five seats in all.

The top is of unique design. When it is not in operation the nickel plated bows are folded down around the rear of the body and the top material is removed and put away in a receptacle which is specially built for it.

### RECORD SALE OF HUDSONS.

Super-sizes Are Coming Through From Factory.

It will be good news to the hundreds of motorists who have been anxiously waiting to get deliveries of the Hudson Super Six cars that they ordered months ago to hear that the Hudson Motor Car Company of Detroit is now gradually catching up with the demand.

Last month the Hudson Motor Car Company of New York, of which Harry S. Houghton is president, delivered 239 Hudson Super Six cars to customers, a record month for the company. Not only this, but Mr. Houghton has assurances from the factory that they will deliver more than

twice this number of cars during the next two months.

"If they do this," said Mr. Houghton, "it will go a long way toward satisfying some of my customers, who have been waiting for weeks to get a car. Most of my customers have been lenient and now I hope to be in a position to reward their patience, by delivering their cars."

KAUFFMAN TO SELL PREMIER.

Has Peugeot Line, Too, at Columbus Circle.

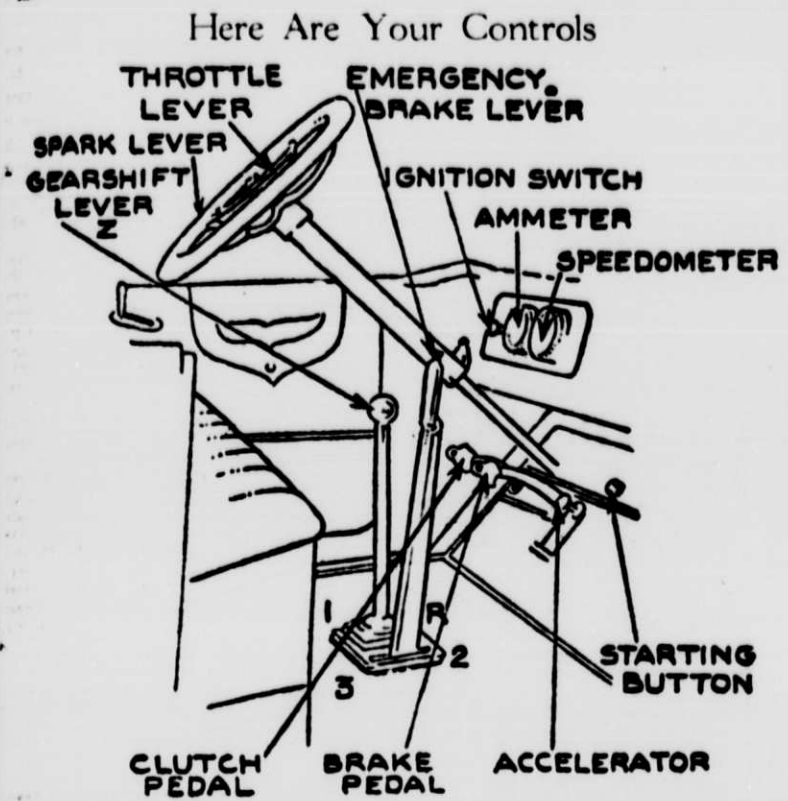
The new Premier and the Peugeot are to be companions on Broadway.

A. G. Kauffman, president of the Peugeot Import Company, at Broadway and Fifty-ninth street, announces that

the imported car made famous by the late George Bollitt, Jules Goux and Dario Resta, and the new Indianapolis built Premier Aluminum Six will be sold off the same floor.

To the Peugeot Import Company of New York must be given full credit for awakening American builders to the full possibilities of the high speed type of motor, of which the new Premier motor is an admirable example.

On May 30, 1913, a Baby Peugeot ran second in the Indianapolis 500-mile race to Jules Goux in a large Peugeot. The midge car maintained an average speed of better than 70 miles an hour for the entire distance, and definitely established the possibilities of limited piston displacement and high speed motors.



The mistake of running the car until it stops and then blaming the car.

Very seldom will an engine "blow down" without first giving warning. Nearly all troubles are in their beginning indicated by particular symptoms, and these can only be detected by one who knows the working principles. Considerable expense and inconvenience may often be avoided by knowing how to make minor adjustments at the proper time. A frequent application of the wrench and oil can is much more effective and economical than the repair shop.

When riding behind a powerful engine few people appreciate the harmony of the infinite number of working parts which afford to them the pleasure of annihilating speed and distance. To the casual observer it seems an easy matter to handle a powerful car, but upon the operator rests the added responsibility of mechanical efficiency.

The carburetor system will rarely give trouble except in cases of fuel or dirty gasoline. To overcome a delay from this source one needs only to drain off the carburetor or clean out the pipe line without necessarily changing the carburetor adjustment. If it should become necessary to remove the needle valve or any other parts a careful note as to their proper replacement should be made.

With the modern lubricating system trouble seldom arises. As proper engine lubrication is a most vital feature of construction, manufacturers have designed this as fool proof as possible, the

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H-A-L and Grant Owners Are Much Pleased.

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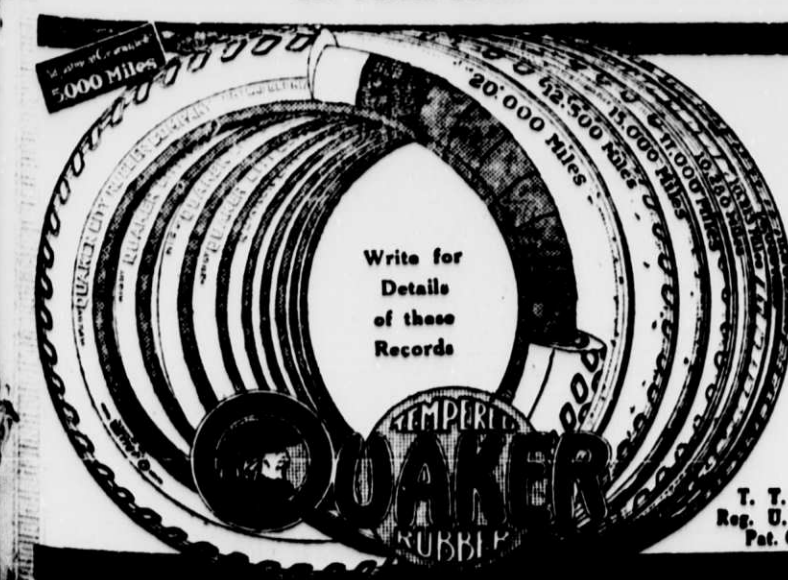
Quaker Tires are sold everywhere, but the sales are greatest where road conditions are the worst. This is suggestive.

**QUAKER TIRES** size up to requirements like a strong, steady man to his job.

Sandy or gravel roads, dirt or clay roads, rock or macadam roads; asphalt, wood block, brick or cobble streets—none has terrors for sturdy Quaker Tires.

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See the local Quaker Dealer  
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**QUAKER CITY RUBBER COMPANY**  
New York Distributing Station  
207 Fulton Street



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BROOKLYN: Bedford Ave. & Prospect Pl. Tel. 9185 Prospect.

BROOKLYN: 140th St. & Third Ave. Tel. 9815 Midway.

NEWARK: Broad & Commercial Sts. (Opp. Post Office). Tel. 8450 Market.

**C. T. SILVER MOTOR CO.**

1760 Broadway at 57th St.

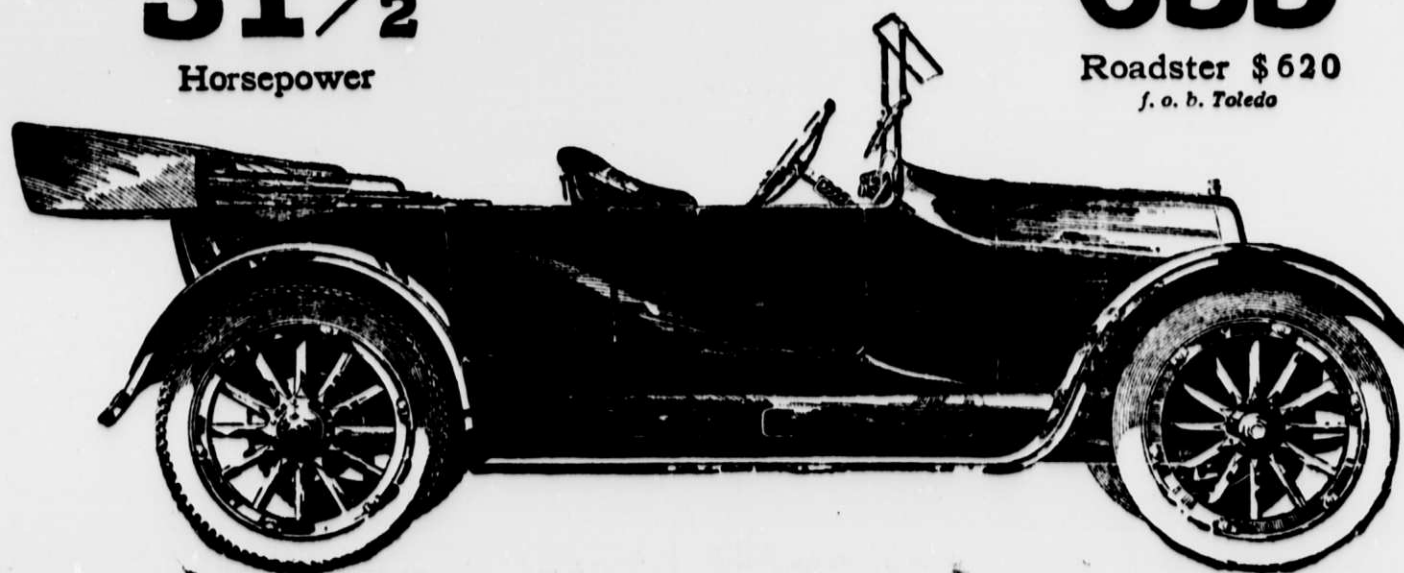
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"Consider new series model 75 B the most flexible, powerful, easiest riding car in the world today."

"Believe the new series 75 B greatest motor car value on earth."

"No four-cylinder motor of its size has as much 'pep,' regardless of price."

"Its hill climbing ability makes one sit up and take notice."

"I consider the new 75 B the best car value ever offered the American people."

"In sand and heavy roads this new car is a wonder. It rides like a rocking chair."

"This model is unquestionably the biggest buy, regardless of price."

"From the standpoint of specifications, equipment, finish, and from

an economical point of view, the new 75 B is a world beater."

"New 75 is a bird. Climbed 2,000 feet in seven miles on high at 25 miles an hour. That is going some."

"If I paid several times the price of a new 75 B my satisfaction could not have been more complete."

"The greatest buy on the automobile counter."

## RIGHT TIRES WILL SAVE YOU EXPENSE

Goodrich Cords, for Instance, Have Proved Saving Qualities by Work on Race Cars.

When the car owner figures his cost of upkeep, next in importance to gasoline comes the cost of tires. One of the big tire manufacturers has come to the front and made a long forward stride toward reducing the cost of gasoline through a tire construction which greatly reduces internal friction.

This largest rubber factory in America, the B. F. Goodrich Company of Akron, Ohio, rightfully credited with making the first pneumatic tire on this continent, in a recent announcement traced their present Silverstown